Research Article

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Assess the Depression and Quality of Life among Women Suffering from Selected Gynaecological Cancers Attending Oncology Units of Selected Hospitals

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ABSTRACT
Backgrounds: Gynecological cancers are significant and probable life-threatening diseases that harm patients' physical and psychological health. The leading cause of death in female's psychological problems like depression endure and can cause an extra burden during their treatment. Therefore, this study helps evaluate depression and well-being among gynaecological malignancies.
Methods: Women's depression was evaluated by a standardized CES-D Scale and QOL by WHOQOL Bref scale, a sample of 100 women with cancers admitted at HSK and Kerudi cancer hospital, Bagalkot was selected using a purposive sampling technique, descriptive survey design was adopted. Statistical data were tested and scrutinized using descriptive and inferential analysis.
Results: 100% of women had moderate depression. The mean percentage of depression score was 61.45% with mean and SD (37±4.9). Of the women, 71 % had moderate, 21%had poor, and 8% had good QOL. The mean percentage of QOL of women was 48.1% with mean and SD (62.5±12.1). A Strong relation was found between depression scores with your family members known to you (χ=4.52, *p*<0.05), Area of residence (χ=3.88, *p*<0.05), and whether you have undergone previously any surgery for the treatment of cancer (χ=8.93, *p*<0.05). No association was found between QOL scores with study variables. A Negative correlation (r=-0.27, *p*<.05) was found between depression and Total QOL scores.
Conclusion: Most patients have moderate depression and moderate QOL. This study is effective in identifying depression and QOL.

Key-words: CES-D, Clinical characteristics. Depression, Gynaecological cancers, QOL, Socio-demographic variables, WHOQOL Bref scale

INTRODUCTION

Malignancy is a group of illnesses characterized by unrestricted cellular growth with local tissue invasion and systematic metastasis. Neoplasm is derived from the Greek word, neo=new and plasma =formation.

Neoplasm is defined as an abnormal new growth of tissues that serves no useful purposes and may harm the host organism [1]. Carcinoma is a destructive neoplasm in which the basic structure and activity of the cells have become unbalanced, usually because of changes in the DNA [2]. Gynaecological cancers such as cervical, uterine, ovarian, tubal, and vulvar are sedate and probably critical illnesses [3].

Gynaecological cancer can harm women's self-concept, physique, sense of femininity, and marital relations [4]. In cancer patients, mental problems are more common, like depression and anxiety, present and can cause an extra

burden during their treatment course and making it more challenging in terms of management and control compliance during the treatment course, duration of hospital stay and ultimately, survival rate [5]. According to the World Health Organization, well-being is defined as individuals' perceptions of their position in life in the context of their culture and systems of values in which they live and about their goals, expectations, standards, and concerns [6]. This study selected gynaecological cancers, including breast, cervical, and endometrial.

MATERIALS AND METHODS

Study design and participants- The study was conducted with a descriptive survey design. 100 women with gynaecological cancer were admitted to oncology units at HSK Hospital Navanagar, Bagalkot and Halamma Kerudi Cancer Hospital. Bagalkot was selected for the study by purposive sampling, ready to join, and women present during data collection were involved as participants.

Instruments

CES-D and WHOQOL Bref scale- CES-D scale and WHOQOL Bref scale were used to examine the level of depression and standard of life. There were 20 questions on the CES-D scale and 26 on 4 aspects of QOL among women attending Halamma Kerudi cancer hospital Navanagar, Bagalkot oncology units. Participants were requested to use separate 3 points and 4 points Likert-type scales for depression and QOL, respectively. The intended 'r-value after spearman brown's prophecy formula is 0.84 for the CES-D scale and 0.79 for the WHOQOL Bref scale, suggesting the developed tool was highly reliable.

Study design and participants- It was a descriptive survey design. A purposive sample of 100 gynaecological cancer patients attending oncology units of selected hospitals of Bagalkot was selected for the study, who are willing to participate in the study and gynaecological cancer patients who are present at the time of data collection are included in the study.

Instruments

CES-D and WHOQOL Bref scale- CES-D scale and WHOQOL Bref scale has used to assess depression and quality of life. There were 20 questions on the CES-D scale and 26 questions on 4 aspects of QOL among women suffering from selected gynaecological cancers

attending oncology units of selected hospitals of Bagalkot. Respondents were asked to rate on separate 5 points on the Likert type scale. After Spearman Brown's prophecy formula, the calculated 'r-value is 0.84 for CES-D scale and 0.78 for WHOQOL Bref scale, suggesting the developed tool was highly reliable.

Data collection procedures- Prior approvals were taken from pertinent foundations before the information acquisition procedure started. The study subjects were accompanied in oncology units during the study period at HSK and Halamma Kerudi Hospital, Bagalkot. Every cancer patient who gratified the inclusion criteria was entered for gathering information. Aspirants accomplished permission, and the aim of the study was interpreted to participants who asked questions in Kannada or the language comprehensible to them. The whole data collection was built on participants' autonomous reports.

Inclusive criteria

The study includes women who are,

➢ Aged between 30 and 60 above.
➢ Admitted with gynaecological cancers.
➢ Available during the time of data collection
➢ Able to comprehend Kannada or English.
➢ Available at the time of data collection.
➢ Ready to participate in the study.

Exclusive criteria

The study excluded women who were

➢ critically ill and impotent to provide data.
➢ Unable to propagate.
➢ Unable to join throughout the study period.
➢ Not willing to give written consent.

Statistical Analysis- Data procured were explored regarding the study's objectives through descriptive and inferential statistics. Participants' responses are taken into consideration, and prepared a master sheet. Demographic data was examined by obtaining frequencies and percentages. Answered questions were deliberated by average and SD. A Chi-square experiment was applied to find out the association between depression and quality of life with their selected socio-demographic variables approachable in tables and graphs.

Ethical clearance- A certificate of ethical authorization was secured from the institution's ethical committee.

RESULTS

Age-wise allocation of women with gynaecological cancers revealed that a greater part of women (44%) belonged to 30-60 years of age (and 53%) belonged to the Hindu religion. (68%) were belong to the Housewives. (29%) were completed their primary and secondary education. 29% had a monthly income of 10,001 to 20,000, and 64% were married. (60%) were belonging to their ancestors who had cancer. (52%) were live in an urban Area. (48%) were having breast cancer. (41%) were below 6 months and 6 months to 1 year, having a duration of time with cancer. (67%) women had no previous surgery for the treatment of cancer. (57%) were exposed to radiation therapy. (59%) were received the chemotherapy 1 to 2 times (Table 1).

Table 1: Percentage-wise majority of the distribution of women according to sample characteristics

Sample characteristics	Category	Percentage (%)
Age	30-60 years	44
Religion	Hindu	53
Occupation	Housewives	68
Educational status	Primary and secondary education	29
Family monthly income	10001-20000Rs	29
Marital status	Married	64
Family history of cancer	Yes	60
Area of residence	Urban	52
Type of cancer	Breast cancer	48
Duration of time with cancer	≤ 6M & 6 M to 1 yr	41
Undergone previous surgery for the treatment	No	67
Have you been exposed to any radiation therapy?	Yes	57
How many times have you received the chemotherapy	1-2 times	59

A higher percentage of women with gynaecological cancers had Moderate Depression (100%), and no women with mild depression. Quality of life among women with gynaecological cancers, where data reveals that most women (71%) had a moderate quality of life. Some women had a poor quality of life (21%), and the remaining parents had good quality of life (8%) and there were no women of very good and very poor quality of life (Table 2).

Table 2: Evaluation of depression and QOL of women with gynaecological cancers

Level of Depression	Frequency	Ratio (%)
Mild	00	0
Moderate	100	100
Degree of QOL	Frequency	Percentage
Very good QOL	0	0
Good QOL	8	8
Moderate QOL	71	71
Poor QOL	21	21
Very poor QOL	0	0

The highest mean percentage of women of gynaecological cancers (49.7%) was found for the social domain with mean and SD (7.46) and (1.76), followed by the physical domain (48.85%) with mean and SD (17.1) and (3.54), Environmental domain (48.27%) with mean and SD (19.29) and (4.10), Psychological domain (47.2%) with mean and SD (14.2) and (3.36), and Overall (45.2%) with mean and SD (4.52) and (1.51) (Table 3).

Findings regarding the Correlation between the depression and quality of life among women of gynaecological cancers show that there is a negative correlation (-0.27) exists between thedepression and quality of life among women of gynaecological cancer admitted in the oncology units of selected hospitals. (r=-0.02; *p*<0.01) (Table 4).

Findings concerning the association between depression scores with their socio-demographic variables show that there was a significant association found between your family members as known to you (χ2=4.52; *p*<0.05), Area of residence (χ2=3.88, *p*<0.05) and have you have been undergone previously any surgery for the treatment of cancer (χ2= 8.93, *p*<0.05) (Table 5).

Table 3: Assessment of mean, standard deviation, and mean percentage of depression score and quality of life among women of gynaecological cancers

Variables	Maximum score	Mean	SD	Mean (%)
OQOL	10	4.52	1.51	45.2
Psychological domain	30	14.2	3.36	47.2
Physical domain	35	17.1	3.54	48.85
Social Domain	15	7.46	1.76	49.7
Environmental domain	40	19.29	4.10	48.27
Total QOL	130	62.5	12.1	48.1
Depression	60	37	4.9	61.5

Table 4: Correlation between depression and quality of life scores of women suffering from selected gynaecological cancers

Correlation between Depression and Quality of life		
Correlation between Depression and Quality of life	OQOL Domain	-0.211
	Physical domain	-0.274
	Psychological Domain	-0.324
	Social Domain	-0.1476
	Environmental Domain	-0.157
	Total QOL	-0.27

Table 5: Relationship between scores of depressions with their research variables

S.No	Research variables	DF	Chi-square value
1	Age	1	0.19
2	Religion	1	0.58
3	Occupation	1	0.09
4	Educational status	1	0.84
5	Family monthly income	1	0.09
6	Marital status	1	0.17
7	Have any of your family members know you?	1	4.52
8	Area of residence	1	3.88
9	Type of cancer that you have been diagnosed with	1	0.031
10	Duration of time with cancer	1	3.71
11	Have you undergone previously any surgery for the treatment of cancer	1	8.93
12	Have you been exposed to any radiation therapy?	1	0.007
13	How many times have you received chemotherapy?	1	1.239

Table value= 3.84

Findings regarding the association between quality-of-life scores with their socio-demographic variables show that there was no significant association ($p<0.05$) found between the quality-of-life scores with their selected socio-demographic variables (Table 6).

Table 6: Association between scores of qualities of life with study variables

S.No	Study variables	Chi-square value
1	Age	0.075
2	Religion	0.333
3	Occupation	0.023
4	Educationals status	0.116
5	Family monthly income	0.767
6	Marital status	0.082
7	Have any of your family members known you?	1.709
8	Area of residence	1.903
9	Type of cancer that you have been diagnosed with	0.147
10	Duration of time with cancer	0.891
11	Have you undergone previously any surgery for the treatment of cancer	2.078
12	Have you been exposed to any radiation therapy?	0.439
13	How many times have you received chemotherapy?	0.235

DF- Degree of freedom=1, Table value= 3.84

DISCUSSION

This chapter deliberates the vital judgements of the study and reviews them about judgements from the results of other studies. The present work examined depression and quality of life among women suffering from selected gynaecological cancers attending oncology units of selected hospitals in Bagalkot. To achieve the study's objectives, the descriptive cross-sectional co-relational survey research design was adopted. By using the purposive sampling technique, 100 women were chosen as participants.

Percentage-wise distribution of women according to their age depicted that the majority of women (44%) belonged to 30-60 years of age, (31%) of women were 60 and above years, (25%) belonged to 25 to 39 years of age. The study's findings are consistent and supported by a previous study conducted by Sundaram *et al.* [7] in Jharkhand, India. The result showed that most of the patients (62.7%) were 40-60 years old.

The majority of women (53%) were Hindus, 34% of women were Muslims, 9% of the women were Christian and followed by 4% of the women were of other religions.

The percentage-wise allocation of women suffering from selected gynaecological cancers according to their Occupation, the majority, 68% of women were housewives, 15% were in daily wages, 12% were self-employees, and 5% of women were professionals. This study is supported by another study conducted by Zaitsu *et al.* [8]. Results revealed that most parents had completed secondary schooling, most were employed 60.3%, and from a socioeconomic perspective, middle- and high-income groups outnumbered the low-income group by 38.2%. The majority, 29% of women, had completed primary and secondary education, 26% had finished a degree, and 16% of women had not finished any formal education.

The majority (29%) of women's family monthly income was between 10,001 to 20,000, (28%) of women had a family monthly income above 20,000 and (26%) of women had an income between 50001 to 10,000, and (17%) of women's family monthly income was below 5000. The majority, 64% of women, were Married, (17%) were Unmarried, (11%) were widows, and (8%) were Divorced. The study is inconsistent and not supported by a study conducted by Luo *et al.* [9] result showed that 57.8% of the patients were married,13% were unmarried, and 29.2% were separated. Percentage-wise distribution of women (60%) their ancestors had no cancer, were as (40%) had cancer. The highest percentage (52%) of women were from Urban, and (48%) of women were from Rural. The study was similar to the previous study conducted by Zahnd *et al.* [10]. Result findings show that Combined cancer frequency rates were generally elevated in urban populations, disregarding the South. However, the urban decrease in incidence rate was more substantial than in rural populations (10.2% vs. 4.8%, respectively. Rural cancer disparities included higher rates of tobacco-related, HPV related, lung and bronchus, cervical, and colorectal

cancers over most population groups. Further, HPV-associated cancer occurrence rates enlarge in rural areas (APC=0.724, $p<0.05$) while temporal trends remain fixed in urban areas. The majority of participating women were (48%) Breast cancer and (41%) of the participated women were Cervical cancer, and (11%) were in Endometrial cancer. The study is inconsistent and not supported by the study conducted by Shirali *et al.* [11]. Results showed that the mean age of patients was 52.8±12.4, and 43% had uterine, 30% had ovarian, 25% had cervical, and 2% had vulvovaginal cancer. The highest percentage of women with cancer showed that (41%) were below 6 months and 6 months to 1 year, and (15%) are 1 to 4 years, and the remaining (3%) were more than 5 years with cancer. Percentage-wise distribution of women who had previously undergone any surgery for cancer treatment shows the highest percentage (67%) had no surgery, and (33%) had previous surgery. Percentagewise distribution of women exposed to radiation therapy shows the highest percentage is (57%) of women saying Yes and (43%) not exposed to radiation therapy. The study's findings are inconsistent and not supported by other studies conducted by Moroney *et al.* [12]. Results showed that (35%) of women were exposed to radiation therapy. Percentage-wise distribution of women who have received chemotherapy shows the highest percentage (59%) of women who received chemotherapy 1 to 2 times, and (32%) never, and the remaining (9%) had not received the chemotherapy. Results of the present study were inconsistent and not supported by a previous study conducted by Uma [13]. Results showed less than 30% defaulted during adjuvant therapy and 20% after the preliminary investigation.

Assessment of levels of depression among women suffering from selected gynaecological cancers reveals that most women had moderate depression (100%). The study was reinforced by a similar study led by Purkayastha *et al.* [14]; results exhibited that depression and poor QOL is natural among breast cancer patients. Findings related to the assessment of mean, SD and mean percentage of depression scores of women suffering from selected gynaecological cancers reveals 61.45% with mean and SD (37±4.9). This study was supported by the study conducted by Alquraan *et al.* [15]. Results showed that the mean age±SD of patients (n=169) was 49.12± 6.48 years.

Findings related to the scores of qualities of life illustrate the highest percentage of women had Moderate QOL (71%), some of them had poor QOL (21%), and the remaining had Good QOL (8%). Alam et al. supported and conducted this study [16]. The result revealed that 5.02% had high QoL, 12.54% had average QoL, 53.76% had low QoL, and the remaining 28.67% had very low QoL. Outcomes related to the analysis of mean, standard deviation, and mean percentage of total QO Lillustrate, the total mean percentage of total QOL of women was 48.1% with mean and SD (62.5 ±12.). This study was endorsed by the study conducted by Sadoughi *et al.* [17]. Results disclosed that the mean of anxiety, depression, and Quality of Life were 10.21±4.79, 8.31±4.74, and 63.74±19.20, respectively.

Findings related to the assessment of domain-wise mean, SD and mean% of total QOL among women with gynaecological cancer revealed that the highest mean percentage of women (49.7%) was found for a social domain with mean and SD (7.46±1.76), followed by the physical domain (48.85%) with mean and SD(17.1±3.54), environmental domain (48.2%) with mean and SD(19.29±4.102), psychological domain (47.2%) with mean and SD(14.2±3.36), and overall (45.2%) with mean and SD(4.52±1.51). This study was supported by the study conducted by Gangane *et al.* [18]. Results revealed that the mean score of total QOL was the overall mean score for QOL was 59.3.

Findings regarding the Correlation between depression scores of qualities of life among women suffering from selected gynaecological cancers showed a significant negative correlation [r= -0.27, $p<0.05$) among women with gynaecological cancer. This study was supported by a study conducted by Rong *et al.* [7]. Results revealed a significant negative correlation between depressive symptoms and QoL (r=−0.400, $p<0.05$).

Findings related to the association between the depression scores of women with their study variables showed that a significant association was found with whether your family members are known to you. (χ2=4.52; $p<0.05$) area of residence (χ2=3.88, $p<0.05$) and this study is supported and conducted by Chen *et al.* [20]. Results show that depressive symptom scores were strongly associated with the housing environment.

Findings regarding the association between the depression score and have you been undergone previously any surgery for the treatment of cancer (χ2=

8.93, *p*<0.05) were consistent and supported, and conducted by Held *et al.* [21] results show that the depression score was associated with 0.20, *p*<0.001. Findings regarding the association between scores of degrees of life of women with their study variables showed no association between the quality-of-life scores with study variables. This study was supported by a study conducted by Orindi *et al.* [22]. Results in findings show the modal age groups (30%) were 45-54 years old and (22.5%) were 25-34 years. Females comprised 63%, and those with post-primary level education 66% (*p*=0.030). Total QOL scores were outstandingly higher among the older age groups, higher education levels, formally employed, and better monthly income within socio-demographic characteristics. These results indicate that most of the patients experienced good enough QOL.

CONCLUSIONS

Depression affects treatment participation and can cause poor resolution and results in solid mortality. It can affect a person's daily life by aggravating physical ailments and augment the negative impact on patients and their families throughout the disease. The nurse's role is to help caretakers cope with their family and hospital environment by providing satisfactory health education to the patient and guiding necessary possessions for the caregivers. Our study concluded that most patients have moderate depression and moderate QOL. This study is effective in identifying depression and QOL.

Future researchers can look over the effect of numerous psychological measures to lessen depression to enhance their overall standard of life and ensure the continuity of quality care; measuring the quality of life in patients with gynaecological is essential.

CONTRIBUTION OF AUTHORS

Research concept- Yashodha Hadimani, Jayashri Awarsang

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